



VI SEMESTER B.TECH. (COMPUTER SCIENCE AND ENGINEERING)

GRADE IMPROVMENT EXAMINATIONS, AUG 2021

SUBJECT: Programming in C# [CSE 4307]

REVISED CREDIT SYSTEM

(14/08/2021)

Time: 2 Hours

MAX. MARKS: 40

Instructions to Candidates:

- ❖ Answer **ANY FOUR FULL** the questions.
- ❖ Missing data may be suitably assumed.

- 1A. Explain in brief the access modifiers/specifiers available in C#. 5M
- 1B. Explain with the help of a sample program the reference parameters and value parameters. 5M
- 2A. Define a class called 'Measure'. This class contains two fields (int data type) inches and feet. Define a constructor to initialize these fields. This class has member methods as follows
 1. Member method called GetData to read values into the member fields.
 2. Member method called PutData to display the values of the member fields.
 Overload '+' operator which adds the corresponding member fields of two instances of the class (if inches is greater than 12, then increase the feet by one). Display the result of the addition. 6M
- 2B. Write a short note on Common Language Runtime (CLR) environment of C#. 4M
- 3A. Explain the two ways for freeing unmanaged resources in C# 6M
- 3B. Explain delegates in C# using a sample program code. 4M
- 4A. Write a C# program to define a list of strings to perform the following operations: 6M
 1. Insert into the list from front end
 2. Insert into the list from rear end
 3. Insert into the list after a particular item;
 4. Display the list from rear end;
 5. Delete a particular item
 6. Display the number items in the list
 7. Check whether a particular item is there or not.
 8. Remove the last item from the list
- 4B. Explain two main properties of string builder class and also give its syntax 4M
- 5A. Explain on Code Access security mechanism in C# 6M
- 5B. Explain implicit permission with the help of a sample code. 4M

- 6A.** Explain how the priorities can be given to the threads in C# with the help of a sample code. Also explain synchronization problem such as race condition and deadlocks in brief **6M**
- 6B.** Define the terms Localization and Globalization. Also, explain in brief three types of culture. **4M**
